

A Technique for investigating the effects of planetary waves on aerosol optical thickness variations

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Abstract

© 2009, Pleiades Publishing, Ltd. We have developed a technique for investigating the planetary waves based on aerosol optical thickness (AOT) observations at spatially separated stations. The technique takes into account the data nonuniformity and makes it possible to investigate the spatial and temporal structure of the AOT and Angstrom parameter variations, which depends on intraseasonal-scale atmospheric wave processes. Based on this technique, we can distinguish periodic synoptic-scale variations and investigate their phase fronts, periods, and wave numbers.

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